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February 19th, 1959. COCOM Document No. 3415.58/2

COORDINATING COMMITTEE

RECORD OF DISCUSSION

ON

ITEM 1558(d)(1)

12th and 16th February, 1959.

S. General

Present: Belgium(Luxembourg), Canada, Denmark, France, Germany, Italy, Japan, Netherlands, United Kingdom, United States.

Reference: COCOM Document 3415.58/1.

1. The CHAIRMAN asked for views on the German proposal to insert the word "all" in the definition of Item 1558(d)(1) before the word "frequencies".

2. The UNITED STATES Delegate said he could agree with the German interpretation of the intent of this sub-item and with the proposal to insert the word "all".

3. The JAPANESE Delegate accepted the proposed change.

4. On the 16th February the UNITED KINGDOM Delegate stated the view of United Kingdom experts that the definition of this sub-item had been worded in its present form because there were various opinions on the frequency at which vibration tests should be carried out. The American specification said 25 cycles per second, the United Kingdom specification said 170 cycles per second and other countries might use other frequencies. However, it was not a question of sweeping the frequency over the whole range 25 to 170 cycles per second but rather vibration for 20 hours at any chosen frequency in this band. For these reasons the United Kingdom Delegation could not agree to the proposal that the word "all" should be inserted in the definition. They considered that it should remain unchanged.

5. The FRENCH expert stated that there were two standard tests, both of which were international. One was known as MIL-E1-B and the other as MIL-STD-202. There were only two machines in existence for carrying out such tests. One was made in the United States by the American Tool Company, and the other in Germany by the Schenk Company. The former carried out vibration tests at frequencies between 10 and 55 cycles per second which strictly fulfilled the specifications of MIL-STD-202. There existed other vibration tests based on other systems which were published in the specification MIL-E1-B and which were used either with the American Tool Company machine or with an electro-dynamic vibrator. He explained that for frequencies between 55 and 170 cycles per second it was necessary to use an electro-dynamic vibrator.

6. Since 1951 the Ministry of Supply in the United Kingdom had used the Schenk machine. These machines were specially equipped for tube tests and the method was comparable to the tests specified in MIL-STD-202.

It could thus be said that MIL-STD-202 corresponded to an internationally agreed method.

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The French expert proposed the adoption of Method 201 of the United States specification MIL-STD-202 Military Standard Test Methods for Electronic and Electric Component Parts as published on page 12 of the edition of the 29 January 1953. This corresponded to the French test (C.C.T.U. Specification Unifiée du Comité Coordination des Télécommunications 01-01, January 1956) which had been recognised by N.A.T.O. The main points of Method 201 were the following:

> PROCEDURE: The specimens shall be subjected to a simple harmonic motion having an amplitude of 0.03 inch (0.06 inch maximum total excursion), the frequency being varied uniformly between the approximate limits of 10 and 55 cycles per second. The entire frequency range, from 10 to 55 cycles and return to 10 cycles, shall be traversed in approximately 1 minute.
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> (NOTE: The tubes are fixed securely to the machine by their own mountings. The motion is applied in one or more directions: each type of tube is tested in three directions perpendicular to one another except when special conditions enable the number of directions to be reduced; each individual specimen, however, is tested in one direction only.)

The expert pointed out that as this method was not identical to the test defined in Item 1558(d)(1), the period of five hours provided for in Test Condition A. of the method quoted would need to be changed. He proposed that the test should be followed strictly in other particulars, but that the duration should be limited to two hours and a half. This was the period fixed for Test Condition B of Method 201 of MIL-STD-202.

7. The CHAIRMAN summed up the discussion by saying that the difficulties in reaching agreement seemed to be due to different measuring methods applied in member countries. He invited Delegations to be prepared at the next round of discussion to state which system was being followed in their country and its applicability to the present definition. Views on the French Delegation's proposal should be given at the same time, if possible.

8. It was AGREED to resume discussion on Item 1558(d)(1) on the 5th March.